

**Amendments to the Claims:**

The following listing of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously presented) A photochromic plastic object comprising a transparent synthetic resin body composed of at least two interpenetrating polymer networks of different polymer materials and at least one photochromic dye homogeneously distributed therein.
2. (Previously presented) A photochromic plastic object according to claim 1, wherein one of the at least two interpenetrating polymer networks is composed of polyurea or polyurethane.
3. (Previously presented) A photochromic plastic object according to claim 2, wherein a second one of the at least two interpenetrating polymer networks is composed of polyacrylate, polymethacrylate or a mixture thereof.
4. (Previously presented) A method of producing a transparent synthetic resin body composed of at least two interpenetrating polymer networks of different polymer materials and at least one photochromic dye homogeneously distributed therein, said method comprising initially producing a first polymer network composed of a first polymer material; subsequently producing a second polymer network composed of a second polymer material different from said first polymer material in such a way that the two networks of different polymer materials interpenetrate, and adding the at least one photochromic dye before or during polymerization.

5. (Previously presented) A method according to claim 4, wherein said first polymer network is produced without using an initiator.
6. (Previously presented) A method according to claim 4, wherein the first polymer network is produced by a polyaddition reaction, and the second polymer network is produced by thermal, radical or UV-light initiated polymerization.
7. (Previously presented) A method according to claim 6, wherein the polyaddition reaction is carried out at room temperature and without using an initiator.
8. (Previously presented) A composite comprised of a photochromic plastic object according to claim 1, and at least one inorganic material.
9. (New) A photochromic plastic object according to claim 1, wherein the object is selected from the group consisting of lenses, visors, and window glazings.
10. (New) A photochromic plastic object comprising a transparent synthetic resin body composed of at least two interpenetrating polymer networks of different polymer materials and at least one photochromic dye homogeneously distributed therein, wherein the at least one photochromic dye is introduced to the polymer networks by a mass dyeing process.